

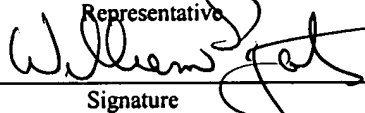
CUSTOMER No. 31013

**THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicants : Phyllis Leithem et al.  
Serial No. : 09/863,585  
Filed : May 16, 2001  
For : ABSORBENT PRODUCTS AND METHODS OF THEIR  
PREPARATION THEREOF  
Group Art Unit : 3761  
Examiner : D.W. Ruhl

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William Spatz  
Name of Applicant, Assignee or Registered  
Representative

  
Signature

March 17, 2004  
Date of Signature

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**APPELLANTS' BRIEF**

Commissioner for Patents  
MAIL STOP APPEAL BRIEF - PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

This is an appeal from the final rejection of claim 104 in this application.

This brief is submitted in triplicate as required by 37 C.F.R. § 1.192(a).

03/24/2004 MAHME1 00000032 500540 09863585  
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This Brief is accompanied by a check in the amount of \$320.00 as set forth in 37 C.F.R. §1.17(c) (Fee Code 1402). Please charge any deficiency or credit any overpayment to Deposit Account 50-0540.

### **REAL PARTY IN INTEREST**

The real party in interest in this appeal is Rayonier Products and Financial Services Company ("RPFSC") which acquired the application from Rayonier Inc. by assignment. The assignment to RPFSC has not yet been recorded with the U.S. Patent & Trademark Office.

### **RELATED APPEALS AND INTERFERENCES**

Appellants are not aware of any related appeals or interferences which directly affect, or are directly affected by, or have a bearing on the Board's decision in this appeal. However, Appellants have requested the declaration of an interference with USPN No. 6,063,982 upon the allowance of this application.

### **STATUS OF CLAIMS**

Claim 104 is pending in this application. Claims 1-103 and Claims 105-150 have been cancelled.

Claim 104 stands rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 3,932,209 to Chatterjee (hereinafter "Chatterjee").

Appendix A, annexed hereto, contains a copy of Claim 104.

### **STATUS OF AMENDMENTS**

Appellants appeal the decision dated June 16, 2003 of the Examiner finally rejecting Claim 104. No amendment under 37 C.F.R. § 1.116 was filed subsequent to the final rejection. However, in the June 16, 2003 Official Action, the Examiner found that the Declaration then of record was defective because two of the inventors failed to identify their citizenship thereon. To

overcome this objection, a Supplemental Declaration with the missing citizenship was filed on December 4, 2003. This appeal is directed solely to the claim rejected in the June 16, 2003 final rejection.

### **SUMMARY OF THE INVENTION**

The present invention relates to absorbent personal hygiene devices, such as for example diapers, which are comprised of an absorbent core containing wood fiber pulp interposed between a water barrier sheet and a layer that allows liquid to pass through it. The wood fiber pulp used in the invention has been treated (extracted) using a caustic solution at relatively low temperature (below 60°C). Wood fiber pulp which is extracted with cold caustic is structurally different than conventional wood fiber pulp by reason of the removal of hemicellulose and lignin from the constituent cellulose fiber by the cold caustic treatment. (See the cited prior art, Chatterjee, Col. 4, lines 50-68, and compare Fig. 1 and Fig. 3 of Chatterjee; see also the Specification of this Application, page 4, lines 9-23). The cold caustic extracted wood fiber pulp used in the claimed product is in individualized fiber form (i.e. fluffed). Individualized wood pulp fibers are formed by mechanical action of a hammermill mill, or other attrition device, prior to incorporation into the absorbent devices. The wood fiber pulp in the absorbent cores of the invention is not chemically crosslinked. (Specification at page 1, lines 5-11, page 14, lines 10-22).

In the production of absorbent devices such as baby diapers, incontinence and catamenial devices and wound dressings (i.e. absorption intensive devices) which contain wood fiber pulp, it has been conventional to use chemical crosslinking to increase the stiffness of the wood fiber pulp fibers, so that a fiber matrix made from them retains its bulk and pore volume

when wet, thereby enhancing its absorbency (Specification at page 2, line 16 to page 3, line 10; and **Chatterjee**, Co. 1, lines 35-40).

Prior to the present invention, it was not believed to be possible to achieve the absorption, insult (or re-wetting), liquid retention, softness and pad integrity of modern absorbent personal hygiene devices without employing chemically crosslinked wood fiber pulp.

Chemically crosslinked wood pulp fiber has increased the wet stiffness which prevents wet fiber collapse, thereby enhancing absorbency. (Specification, page 3, lines 3-9). The Specification of the present application at page 2, lines 16 to 22 references several prior patents directed to the use of chemically crosslinked wood fiber pulp in absorbent personal hygiene articles. The cited art of record, **Chatterjee**, is another such example. The present invention surprisingly discovered that by employing wood fiber pulp according to the invention, an absorbent core with desirable absorbency properties for use in personal hygiene devices could be formed without chemically crosslinked wood fiber pulp. The avoidance of chemically crosslinked wood fiber pulp was the expressed objective of the present invention (Specification at page 1, lines 6-12).

The present invention is commercially important in that it enables the manufacture of absorbent articles containing wood fiber pulp without the expense of using chemically crosslinked wood fiber pulp. The same invention has already been patented in U.S. Patent No. 6,063,982 with which Appellants have requested that an interference be declared. Applicants' Request for Interference was filed in this application on August 27, 2001.

### ISSUES

The issue on appeal is whether claim 104 is patentable under 35 U.S.C. §102(b) over U.S. Patent No. 3,933,209 to **Chatterjee**.

**GROUPING OF CLAIMS**

Only one claim is pending.

**ARGUMENT**

**Claim 104 is patentable under 35 U.S.C. §102(b) over U.S. Patent No. 3,932,209 to Chatterjee ("Chatterjee")**

The Examiner rejected claim 104 as anticipated under Section 102(b) in view of **Chatterjee**, notwithstanding that **Chatterjee** teaches absorbent devices made with wood fiber pulp which is chemically crosslinked. See, **Chatterjee**, Col. 3, lines 3-17. Claim 104 requires that the fluffed wood fiber pulp in the absorbent core of the present invention be without chemical crosslinking.

**Chatterjee** failed to appreciate that caustic extracted pulp prepared in accordance with the teachings of the present application possesses absorption, insult, liquid retention, softness and pad integrity properties which enable it to be advantageously used in the claimed absorbent devices without chemical crosslinking. The Applicants subjected dozens of pulps to low temperature caustic extraction at a variety of conditions and then subjected those samples to exhaustive testing, including absorbency testing. By this testing, which is referenced in the instant application in the Examples reported at pages 16, 17, 22, 23, 26-32, 39-41, 45-47, 50, 52, 56, 58, 60, 61, 64, 66, 69 and 71, Applicants discovered that wood fiber pulp which is caustic extracted and fluffed has absorbency properties, softness and strength which enables its use in the claimed absorbent devices without chemical crosslinking.

Applicants argued below that **Chatterjee** taught away from the presently claimed invention by his reliance on the use of chemically crosslinked wood fiber pulp. The Examiner never addressed this argument, but rather took the position that the limitation of "without chemical crosslinking" in the Claim 104 did not cause the claim to define over **Chatterjee**,

because the “end structure (that the claimed product by process limitation results in) is the same as the end structure of **Chatterjee**”. In support of this, the Examiner offered that “Applicant has even made statements attesting to the fact that the advantages/properties of **Chatterjee** can be obtained without the crosslinking step. If the end result is an article with the same properties/advantages of **Chatterjee**, the 102 rejection is still proper. The manner in which the article has been made does not get patentable weight, only the end structure. Applicants’ arguments amount to an argument that the method is novel, not the article. It very well may be that applicant has a different method that results in the same end structure but in article claims only the end structure is given weight, not the manner in which the end structure has been made.”

The Examiner takes the position that Applicants’ claim is drawn to a product but incorporates process limitations, to which weight cannot be given in a product claim. The Examiner applies this logic to the clause “wherein said fluffed wood fiber pulp . . . is without chemical crosslinking,” . . . This rejection is believed to be misplaced because “is without chemical crosslinking” is not a process limitation. The language the Examiner has focused on in rejecting the claim precludes the presence of chemical crosslinking of the wood fiber pulp without regard to any process by which it might be introduced. Second, even if this were to be a process limitation, the Examiner’s rejection relies upon a general rule in a situation where it simply does not apply. Where manufacturing process steps would be expected to impart distinctive structural characteristic to a final product, they must be considered. See *In re Garnero*, 162 USPQ 221, 223 (CCPA 1979).

Since Applicants’ claim recites that the cold caustic extracted wood fiber pulp in the absorbent core of the claimed device is without chemical crosslinking, Applicants’ claimed

product has a distinctive structural characteristic, i.e. it contains wood fiber pulp which is not chemically crosslinked. One skilled in the art would not equate chemically crosslinked wood fiber pulp with such pulp which is not crosslinked because they are structurally different by reason of the physical presence of a chemical crosslinking agent. Even if the performance of crosslinked and non-crosslinked products were to be identical, they are nevertheless structurally different.

The Examiner does credit the limitation wherein said “wood fiber pulp comprises wood fiber pulp that has been cold caustic extracted and fluffed by mechanically action . . .” as defining a product having distinctive structural characteristics, as indeed he must since the prior art relied upon discloses a product having the same structural characteristics which is made in the same way. In this connection, the Examiner has cited **Chatterjee** as disclosing personal hygiene devices which contain cold caustic extracted fluffed wood fiber pulp. Applicants acknowledge that **Chatterjee** discloses the use of cold caustic extracted wood fiber pulp which is mechanically fluffed in conforming absorbent personal hygiene devices, and that the Examiner’s citation of **Chatterjee** shifted the burden to Applicants to show an unobvious difference between their product and the product of a cited reference. MPEP § 2113; *In re Freeman*, 180 USPQ 324, 326 (CCPA 1974). However, Applicants have met the burden of showing an unobvious difference between their product and the product of the cited reference. As indicated above, the absorbent devices of the prior art while admittedly containing cold caustic extracted wood fiber pulp which is fluffed by mechanical action, utilizes pulp which is chemically crosslinked. The claimed product contains wood fiber pulp which is without chemical crosslinking. Since Applicants have achieved a superior absorbent personal hygiene without the use of chemically crosslinked wood fiber pulp, which the prior art taught was necessary, Applicants’ claimed

invention cannot be anticipated by **Chatterjee**. Further while there is no Section 103 rejection of record, the claimed invention cannot be obvious in view of **Chatterjee**, since **Chatterjee** teaches away from the invention. Accordingly, the reference relied upon by the Examiner would lead one skilled in the art to adopt the expedient of using chemically crosslinked wood fiber pulp which the present invention seeks to avoid and which is expressly precluded by claim 104.

### CONCLUSION

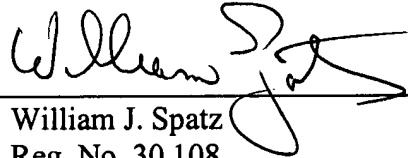
For these reasons, Applicant submits that their invention is novel and unobvious and that the rejection of Claim 104 is improper and should be reversed. Allowance of claim 104 is in order. Such action is solicited.

Dated: March 17, 2004

Respectfully submitted,

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Appendix A

Claim 104.

An absorbent personal hygiene device comprising: a layer that allows liquid to pass, a water barrier sheet, an absorbent core interposed between said layer and said sheet, the absorbent core containing at least about 25% of fluffed wood fiber pulp, wherein said fluffed wood fiber pulp comprises wood fiber pulp that has been cold caustic extracted and fluffed by mechanical action and is without chemical crosslinking.